

Date: Tuesday, 4/24/2007 3:23:54 PM  
User: Kim Johnston

# Process Sheet

Customer : CU-DAR001 Dart Helicopters Services  
Job Number : 32049  
Estimate Number : 12315  
P.O. Number : N/A  
This Issue : 4/24/2007 S.O. No. : N/A  
Prsht Rev. : NC  
First Issue : N/A Type : SMALL /MED FAB  
Previous Run : 27017

Drawing Name : DUCT

Part Number : D34731  
Drawing Number : D3473 REV B  
Project Number : N/A  
Drawing Revision : B  
Material : **NIA**  
Due Date : 5/8/2007

Qty: 2 Um: Each

Written By :  
Checked & Approved By : 07.04.25  
Comment : Est Rev:A New Issue 06-03-02 JLM  
Est Rev:B As per Rev B 06-05-24 JLM

### Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0 M304S26GA 304/316 0.018 SHEET



**Comment:** Qty.: 0.6305 sf(s)/Unit      Total : 1.2611 sf(s)

304/316 0.018 SHEET

Batch: M103678 ml 01 04 26

2.0 WATER JET FLOW WATER JET



**Comment:** FLOW WATER JET

Cut as per Dwg D3473

Dwg Rev: B

Prog Rev: B

ml 07 04 26

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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**Comment:** INSPECT PARTS AS THEY COME OFF MACHINE

4.0 QC8 SECOND CHECK



**Comment:** SECOND CHECK

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
-----	-------------	-------------------------------



Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Deburr if necessary.

2-Roll as per Dwg D3473

3-Form Small Flange as per Dwg D3473 using DT8861 Base & Dt8847B Male Die

12  
 12  
 12

07.04.30 ②

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: ☒ Date: 07/05/02

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
				1103011/		1103011/		

NOTE: Date & initial all entries

Date: Tuesday, 4/24/2007 3:23:54 PM

User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DUCT

Job Number: 32049

Part Number: D34731

Job Number:



Seq. #:

Machine Or Operation:

Description :

4-Form Large Flange as per Dwg D3473 Using DT8862

SB 07.04-30 (2)

5-Spot Weld as per Dwg 3473

6.0 QC11

VISUAL INSPECTION OF SPOT WELDING



Comment: VISUAL INSPECTION OF SPOT WELDING

SB 07.104/30 (2)

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SB 07.104/30 (2)

8.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: GA

SB 07.104/30 (2)

9.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

07/05/02

Job Completion



u 07.05.02

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

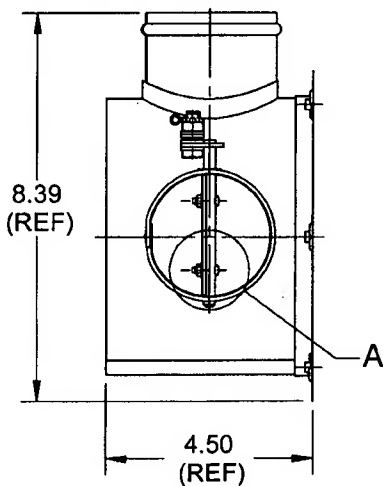
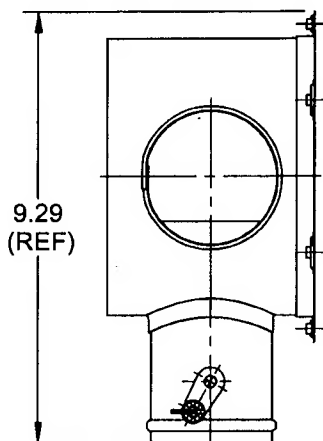




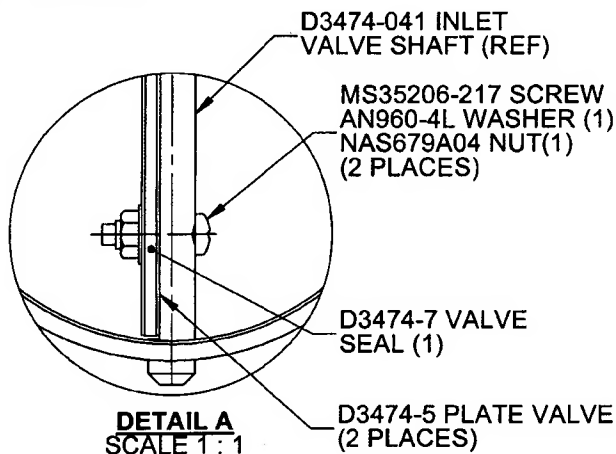
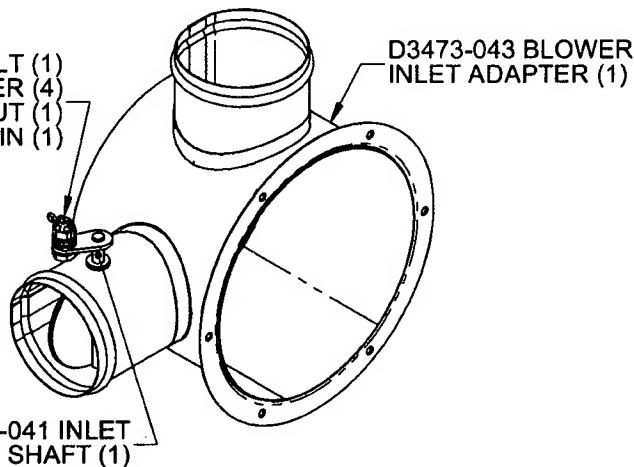


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06-05-16

DESIGN B	DRAWN BY B	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED H	APPROVED H	DRAWING NO. D3473	REV. B SHEET 1 OF 7
DATE 06.05.16		TITLE BLOWER INLET ADAPTER	SCALE 1:4
A	06.02.07	NEW ISSUE	
B	06.05.16	D3473-5F/-7F: 9.750 & 8.810 WERE 9.60 & 8.60	



D3470-9 BOLT (1)  
AN960-416 WASHER (4)  
AN310-4 NUT (1)  
MS24665-153 COTTER PIN (1)



### D3473-041 BLOWER INLET ADAPTER

#### NOTES:

- 1) IDENTIFY WITH DART P/N D3473-041 USING FINE POINT PERMANENT INK MARKER
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

QTY -041	P/N	DESCRIPTION
X	D3473-041	BLOWER INLET ADAPTER
1	D3470-9	BOLT
1	D3471-043	BLOWER INLET WELDMENT
1	D3474-041	INLET VALVE SHAFT
2	D3474-5	BUTTERFLY VALVE
1	D3474-7	BUTTERFLY VALVE SEAL
1	AN310-4	NUT
2	AN960-4L	WASHER
4	AN960-416	WASHER
1	MS24665-153	COTTER PIN
2	MS35206-217	SCREW
2	NAS679-A04	NUT

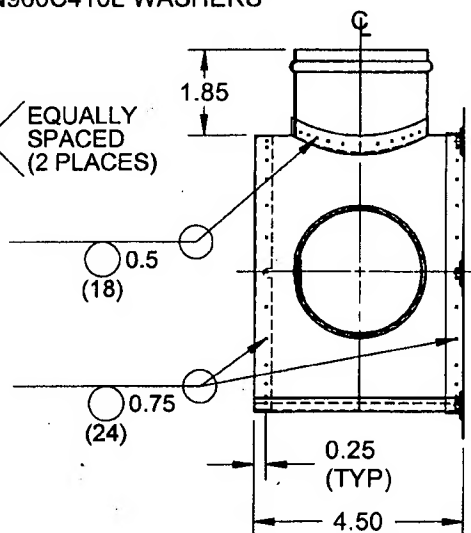
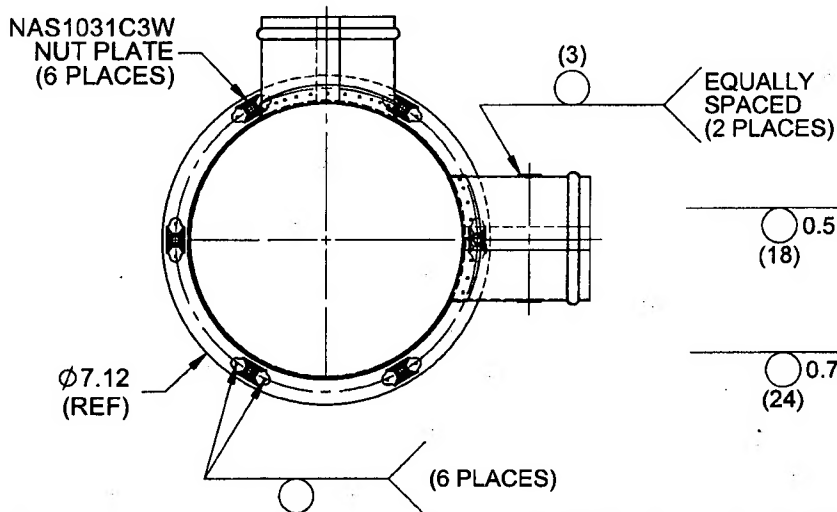
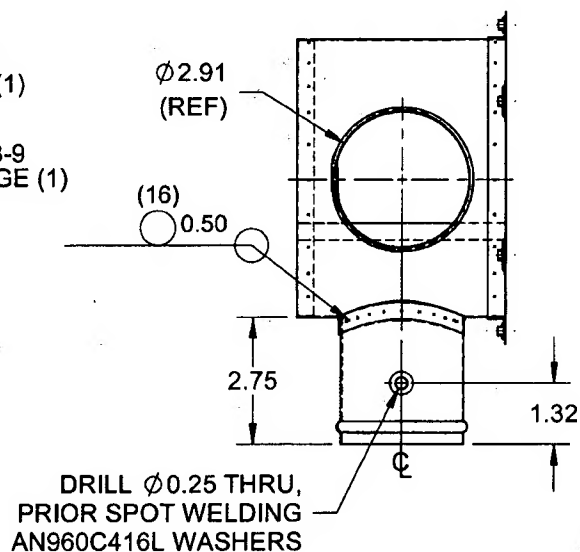
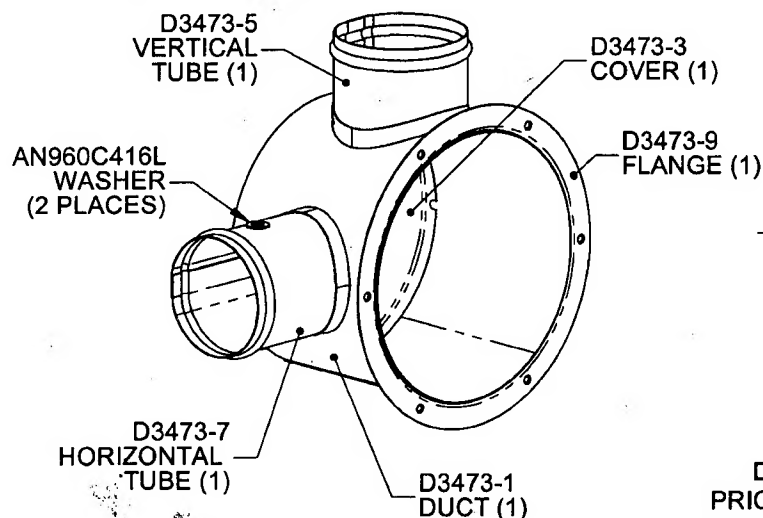
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DATE <b>06.05.16</b>		TITLE <b>BLOWER INLET ADAPTER</b>	SCALE 1:4

RELEASED  
06.05.16



### D3473-043 BLOWER INLET WELDMENT

#### NOTES:

- 1) SPOT WELD PER DART QSI 004
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

QTY -041	P/N	DESCRIPTION
X	D3473-043	BLOWER INLET WELDMENT
1	D3473-1	DUCT SHOP COPY
1	D3473-3	COVER RETURN TO
1	D3473-5	VERTICAL TUBE ENGINEERING
1	D3473-7	HORIZONTAL TUBE UNCONTROLLED COPY
1	D3473-9	FLANGE SUBJECT TO AMENDMENT
		WITHOUT NOTICE
2	AN960C416L	WASHER WORK ORDER
6	NAS1031C3W	NUT PLATE NO. 32049

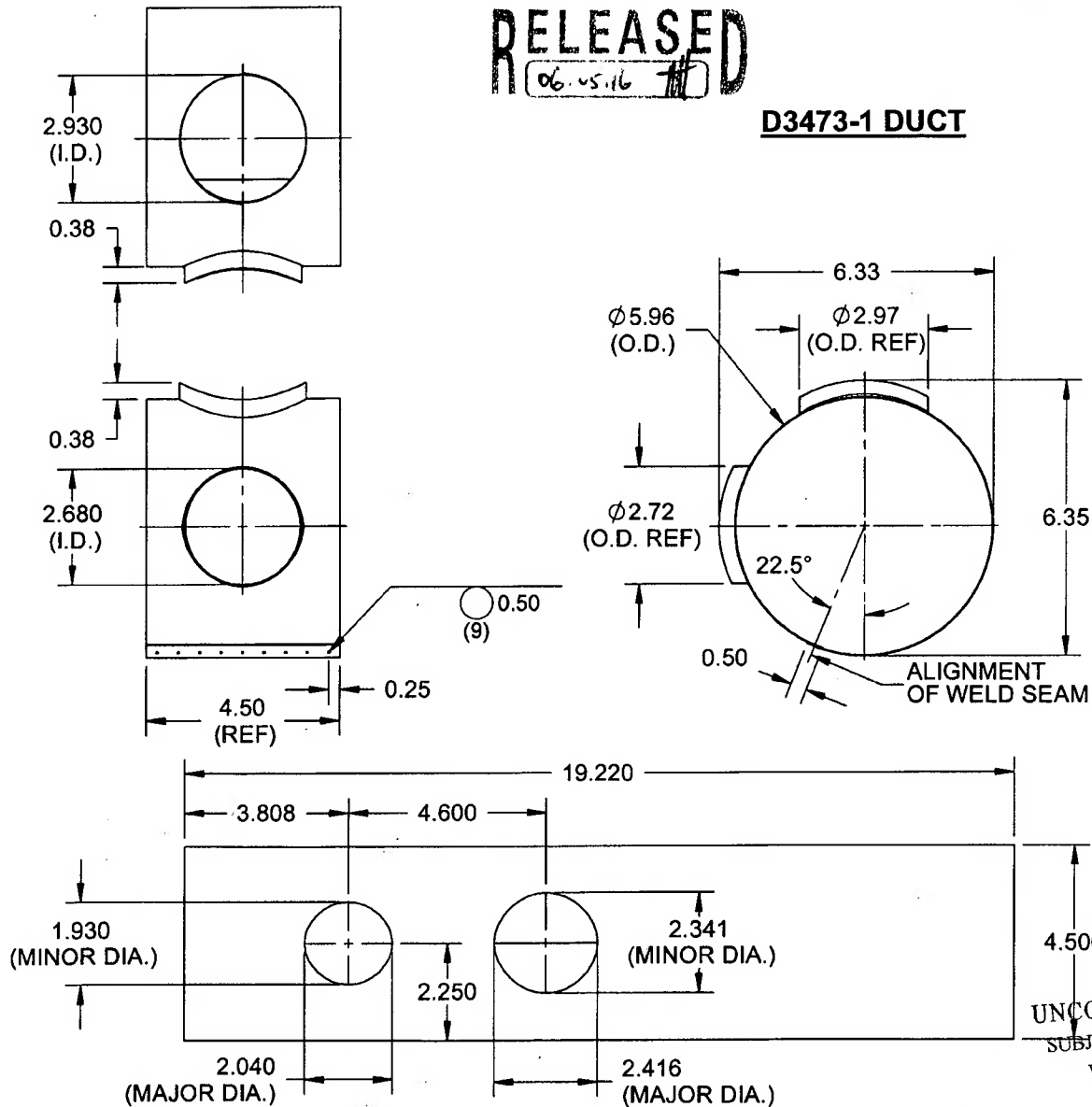
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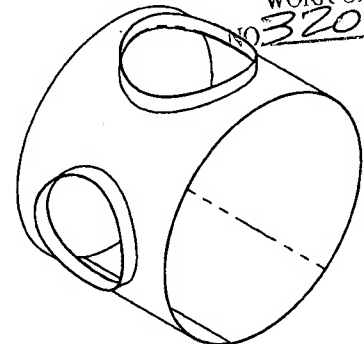
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DATE 06.05.16		TITLE BLOWER INLET ADAPTER	SCALE 1:4

**RELEASED**  
06.05.16 *#***D3473-1 DUCT**

SHOP COPY  
4.500 RETURN TO  
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SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
32049

**D3473-1F DUCT FLAT PATTERN****NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED)  
2B FINISH 26 GAUGE SS (0.018 THICK)
- 2) SPOT WELD PER DART QSI 004
- 3) FINISH: NONE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) BREAK ALL SHARP EDGES 0.005 TO 0.010

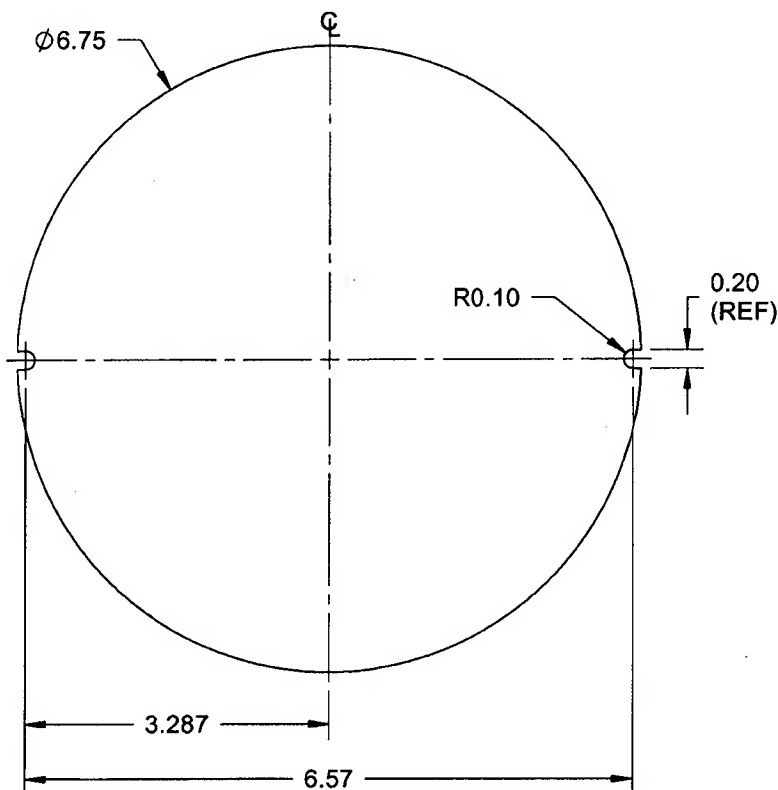
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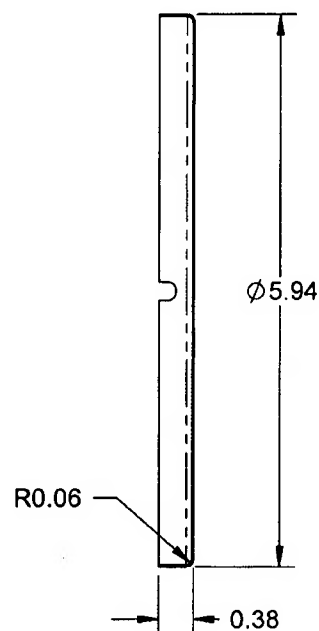


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DATE 06.05.16		TITLE BLOWER INLET ADAPTER SCALE 1:2	

RELEASED  
06.05.16 *H*



**D3473-3F COVER FLAT PATTERN**



**D3473-3 COVER**

**NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK)
- 2) PART IS SYMMETRICAL ABOUT CENTERLINE
- 3) FINISH: NONE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010

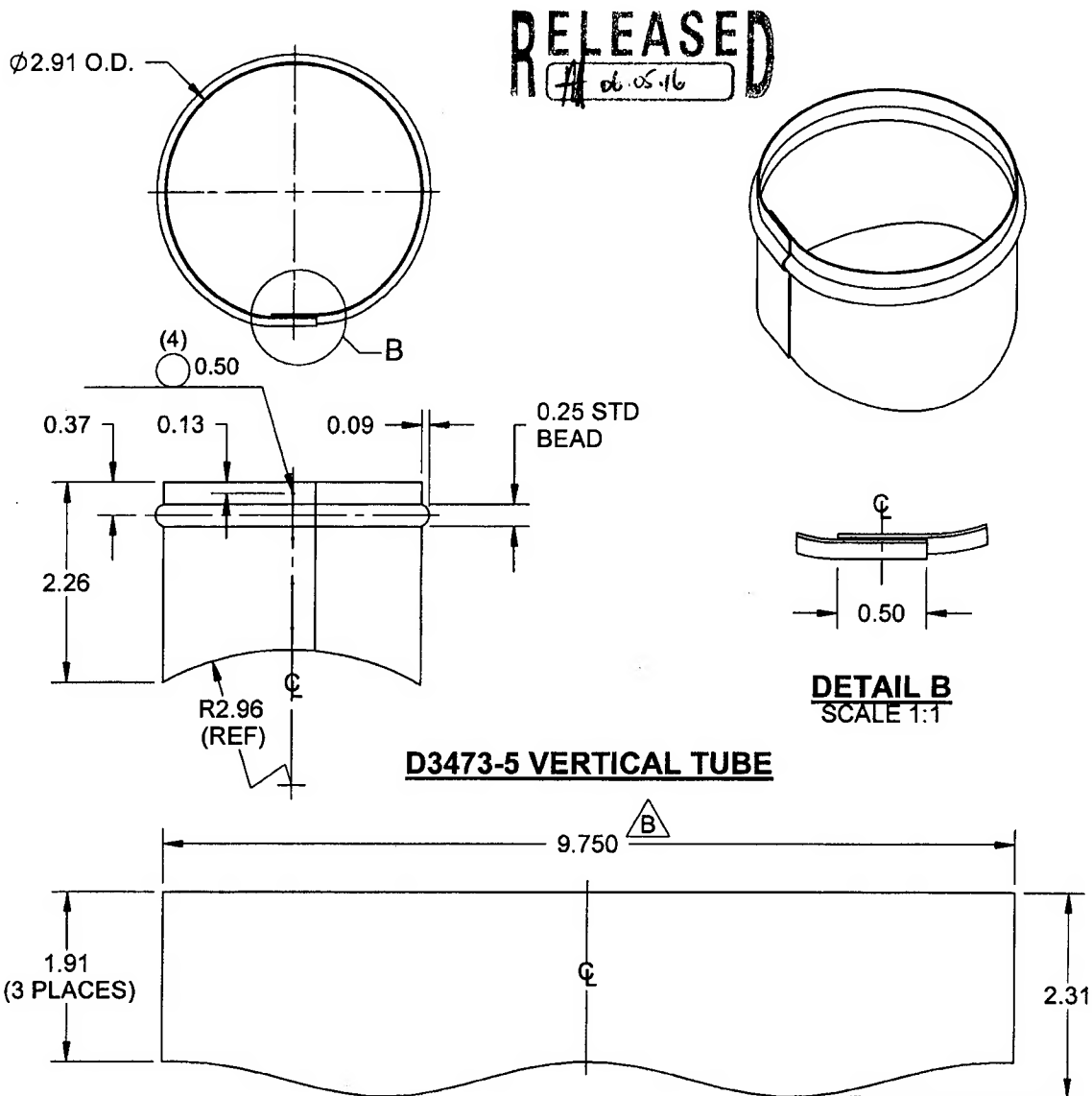
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DATE <b>06.05.16</b>		TITLE <b>BLOWER INLET ADAPTER</b>	SCALE 1:2

**D3473-5F VERTICAL TUBE FLAT PATTERN****NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK)
- 2) SPOT WELD PER DART QSI 004
- 3) FINISH: NONE
- 4) FLAT PATTERN IS SYMMETRICAL ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) BREAK ALL SHARP EDGES 0.005 TO 0.010

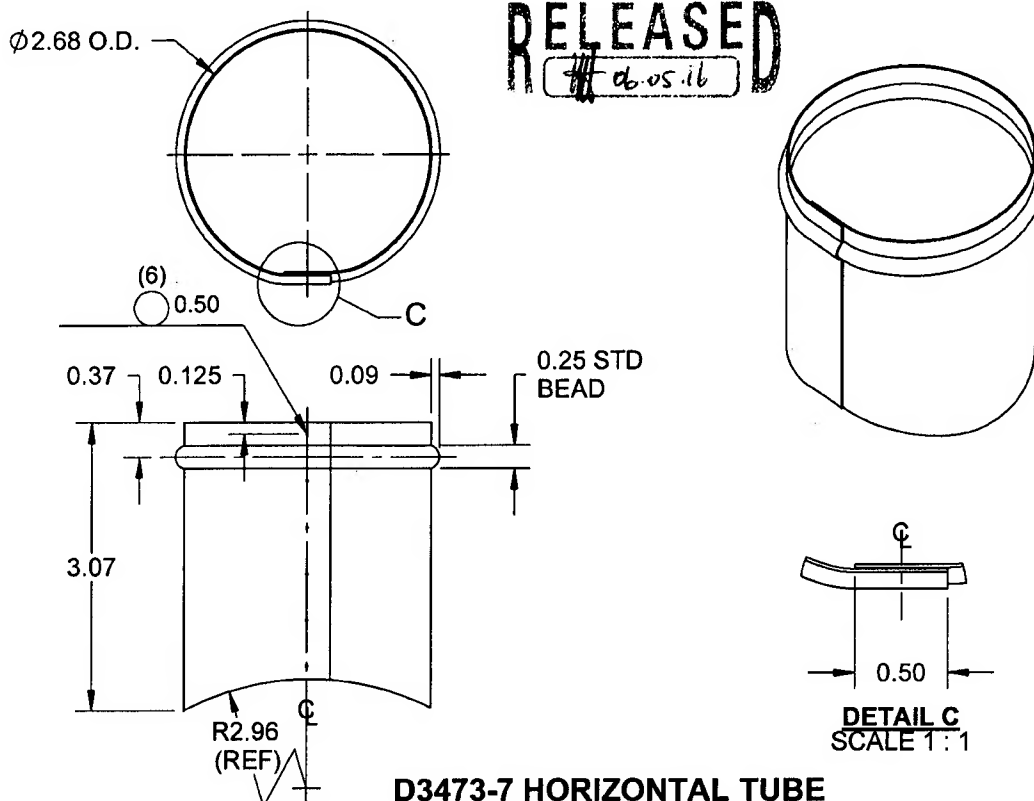
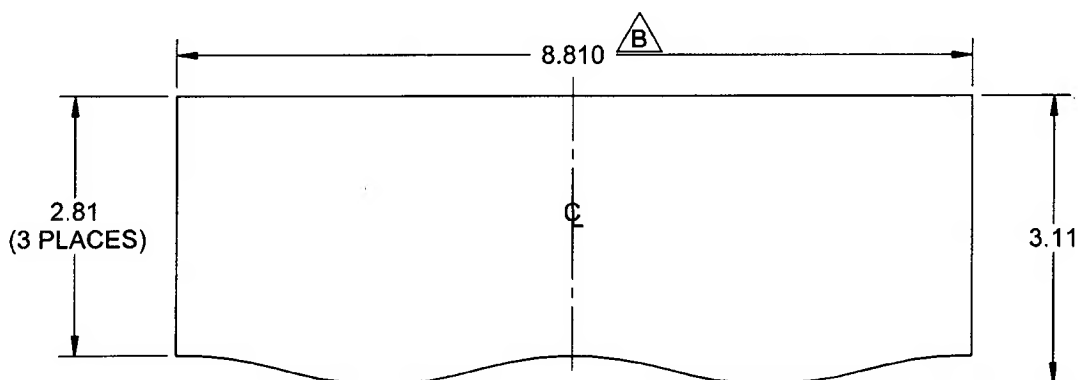
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CHECKED <i>H</i>	APPROVED <i>H</i>	DRAWING NO. D3473	REV. B SHEET 6 OF 7
DATE 06.05.16		TITLE BLOWER INLET ADAPTER	SCALE 1:2

**D3473-7 HORIZONTAL TUBE****D3473-7F HORIZONTAL TUBE FLAT PATTERN****NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK)
- 2) SPOT WELD PER DART QSI 004
- 3) FINISH: NONE
- 4) FLAT PATTERN IS SYMMETRICAL ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) BREAK ALL SHARP EDGES 0.005 TO 0.010

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WORK ORDER  
NO. *32049*

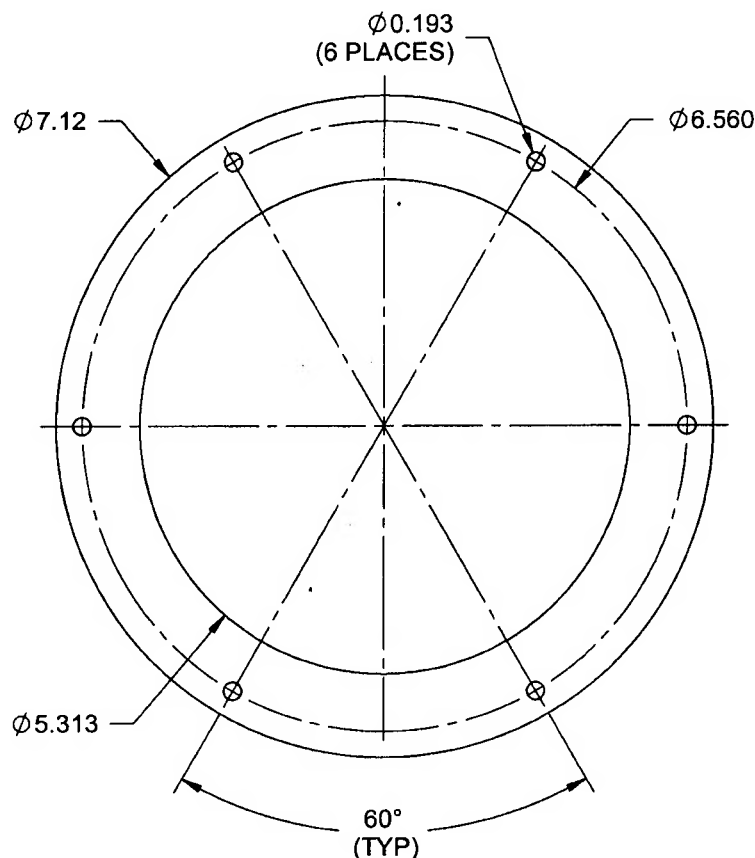
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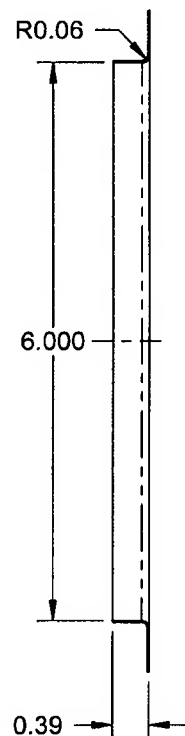


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DATE 06.05.16		TITLE BLOWER INLET ADAPTER SCALE 1:2	

RELEASED  
*06.05.16*



**D3473-9F FLANGE FLAT PATTERN**



**D3473-9 FLANGE BENDING DETAIL**

**NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH 26 GAUGE SS (0.018 THICK) (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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NO. *32049*

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# SPOT WELD TEST RECORD

AMS-W-6858A

CLASS ' C '

TEST NO: 9

EMPLOYEE: Don Stow

PART NUMBER: D3473-1

JOB NUMBER: B32049

MATERIAL TYPE: 304 S

MATERIAL THICKNESS: 26 G

GROUP SPECIFICATION: 3

Group 1: Aluminum & magnesium

Group 2: Iron; nickel; cobalt

Group 3: Titanium

## TEST RESULTS

PASS FAIL

VISUAL: [ ☒ ] [ ] [ ]

PENETRATION: [ ☒ ] [ ] [ ]

PULL STRENGTH: [ ☒ ] [ ] [ ] PSI Reading: \_\_\_\_\_

The individual named above has been trained and is qualified in accordance with standard AMS-W-6858A, and QSI 004 ( ref: 4.3 )

DATE OF TEST COUPON: 07/04/30

QUALIFIER: SB